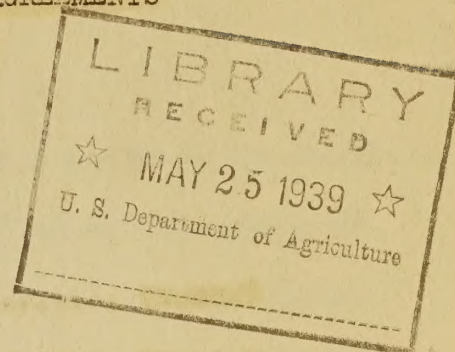


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May 1939

UNITED STATES DEPARTMENT OF AGRICULTURE
DIVISION OF MARKETING AND MARKETING AGREEMENTS



ECONOMIC STATEMENT RELATING TO THE MARKETING OF
PACIFIC COAST FALL AND WINTER PEARS

Prepared for the purpose of assisting in the consideration of a proposed marketing agreement and order regulating the handling of Beurre d'Anjou, Beurre Bosc, Winter Nelis, Doyenne du Comice, Beurre Easter, and Beurre Clairgeau varieties of fresh pears grown in the States of Oregon, Washington, and California.

Economic Analysis Unit

May, 1939

ECONOMIC STATEMENT RELATING TO THE MARKETING OF

PACIFIC COAST FALL AND WINTER PEARS

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ECONOMIC STATEMENT RELATING TO THE MARKETING OF
PACIFIC COAST FALL AND WINTER PEARS

Summary

1. The major varieties of fall and winter pears grown on the Pacific Coast are, in the order of their importance as indicated by the number of acres standing in 1936, d'Anjou, Beurre Bosc, Winter Nelis, Beurre Hardy, and du Comice. D'Anjou pears with an acreage of 9,860 acres or 35 per cent of the total late pear acreage are grown mainly in both districts of Oregon and Washington. Beurre Bosc pears with an acreage of 6,070 or 21 per cent of the fall and winter pear acreage are grown in the Medford District of Oregon and the Foothill Regions of the Sierra Mountains in California. The Winter Nelis variety with 4,330 acres or 15 per cent of the total late pear acreage is grown mainly in California, the Yakima District of Washington, and the Medford District of Oregon. The Beurre Hardy variety with 2,770 acres is the fourth major variety of late pears. The fact that this variety is produced only in California, has a comparatively early and short marketing season, and is sold chiefly in export markets, gives it a special position in late pear marketing. This has resulted in the proposal of a separate marketing agreement for Beurre Hardy pears.

2. The marketing period for fall and winter pears extends from August of one year to June of the following year. The season begins with the marketing of California Hardy pears, continues with the marketing of Beurre Bosc and Comice pears in September, October, and November and closes with Anjou and Winter Nelis sales beginning in November and ending in May and June of the following year. The shipments of California late pears reach the market before the same varieties from Oregon and Washington are ready to

be shipped. Export shipments are made mainly during the early part of the season and because of competition from unstored foreign pears do not continue in volume during the rest of the season.

3. Shipping records for the 1935-36 to 1937-38 seasons indicate an average volume of 3,880,000 boxes of domestic and foreign shipments. Approximately 21 per cent of the volume shipped during the above three seasons originated in California, 46 per cent in Oregon, and 33 per cent in Washington. Approximately 1,735,000 boxes or 45 per cent of the total were sold in export markets. Most of the pears from the two Oregon districts and the Wenatchee District in Washington are shipped to domestic markets. Over 50 per cent of all shipments from California and the Yakima District in Washington are sold to foreign countries.

4. The average volume of late pears shipped to domestic markets during the 1935-36 to 1937-38 seasons was 2,144,000 boxes, 88 per cent were sold in 18 Northeastern States, while Central and Southern States received only 5 per cent of the domestic shipments. Relating the average shipments of late pears to the population in cities of 10,000 inhabitants and over, shipments to the Northeastern States averaged 45.8 boxes per 1,000 of urban population, while those to Central and Southern States averaged 9.2 boxes per 1,000. The average of all domestic shipments in relation to urban population was 36.8 boxes per 1,000 persons of urban population.

5. Export shipments of late pears were made primarily to Europe. This continent received on the average of the 1935-36 to 1937-38 seasons 81 per cent of all export shipments. Only a small volume of pears is sold on each of the other continents.

6. New York auction prices of fall and winter pears declined drastically during the last ten-year period. For most varieties, prices during the 1938 season were 50-60 per cent of those prevailing during the period prior to 1928.

7. Returns to growers for the major varieties of fall and winter pears prior to 1929 averaged around \$2.00 per box or over. Beginning with the 1930 season, growers experienced a drastic reduction in their income, which reached the lowest point in 1932. Since that year returns have fluctuated but have been considerably below returns prior to 1929. The decline to growers was more drastic in the case of the Beurre Bosc and Winter Nelis varieties than in the case of d'Anjou pears.

8. An analysis of the net returns to growers from New York auction sales of Oregon and Washington Beurre Bosc and d'Anjou pears by grades and sizes indicates that sales of pears grading below the Fancy grade resulted in losses to the grower. With regard to returns from sales of the various size groups of Oregon and Washington d'Anjou and Beurre Bosc pears, sizes smaller than 180 and those larger than 110, sold from 10 to 50 cents and 6 to 20 cents, respectively, below the preferred size group of sizes 120 to 180. For Winter Nelis pears the sales of sizes 120-180 resulted in returns 5 to 15 cents greater than for larger or smaller sizes.

9. Prices received by growers since 1930 have been considerably below the level of prices necessary to give producers a purchasing power per unit comparable to that which prevailed during the base period 1919-1928. Prices received by growers in California during the 1938 season were 10 per cent of parity. Prices of d'Anjou and Beurre Bosc pears grown in the Medford

District of Oregon during the past season were 31 and 9 per cent, respectively, of parity prices. Washington d'Anjou pears returned to growers an average of \$0.11 per box during the 1938 season while sales of Bosc pears resulted in a loss of \$0.20 per box. Parity for these varieties is \$1.35 and \$1.46, respectively.

10. Production of fall and winter pears is limited almost exclusively to the three Pacific Coast States of Oregon, Washington, and California. Of the total late pear acreage on the Pacific Coast of approximately 28,500 acres, 34 per cent are located in California, 43 per cent in Oregon, and 23 per cent in Washington.

11. Production of late pears on the Pacific Coast is concentrated in six major districts, two in each of the three states. In California, the Santa Clara Valley and the Foothill Region of the Sierra Mountains are the most important late pear producing areas. In Oregon, the Medford District and the Hood River District, including Skamania and Klickitat Counties of Washington, are the major producing areas. Late pear production in the State of Washington is concentrated in the Yakima and Wenatchee Districts.

12. The volume of fall and winter pears produced on the Pacific Coast during the five-year period 1933-1937 amounted to approximately 110,000 tons, an increase of 22 per cent over the preceding five-year period. Late pear production in California, comparing the same two five-year periods, has increased by 6 per cent, in Oregon by 26 per cent, and in Washington by 33 per cent. In all three states there was a much larger crop in 1938. The total Pacific Coast late pear production in 1938 is estimated to have been 155,300 tons, of which California produced 40,000 tons, Oregon produced 70,300 tons, and Washington produced 45,000 tons.

ECONOMIC STATEMENT RELATING TO THE MARKETING OF

PACIFIC COAST FALL AND WINTER PEARS

Major Varieties of Fall and Winter Pears

The major varieties of fall and winter pears^{/1} in the order of their importance as evidenced by the number of acres standing in 1936 are: D'Anjou, 9,860 acres; Beurre Bosc, 6,070 acres; Winter Nelis, 4,330 acres; Beurre Hardy, 2,770 acres; and du Comice, 1,850 acres. In addition to these there are 3,610 acres of miscellaneous minor varieties which, although comparatively insignificant in total late pear production, are of considerable importance in certain local areas of the Pacific Coast region.

Except for the Beurre Hardy pear, which is produced in California exclusively, all major late pear varieties are found in each of the pear districts of the three Pacific Coast states. The fact that the Beurre Hardy variety is produced only in California, has a comparatively early and short marketing period, and is sold chiefly in export markets, gives this variety somewhat of a special position in late pear production and marketing. This has resulted in the proposal of a separate marketing agreement for Beurre Hardy pears.

The most important of all winter pear varieties in size of plantings is the d'Anjou variety. It comprises 35 per cent of the total late pear acreage and is grown extensively in both districts of Oregon and Washington. The comparatively small acreage in California is located in the Santa Clara Valley District and the Foothill regions of the Sierra Mountains. Of the total acreage of d'Anjou pears, California has 6 per cent, Oregon 63 per cent,

^{/1}. The term "fall and winter pears" or "late pears" refers to the late dessert varieties of pears which are consumed in fresh form. This definition, for all practical purposes, includes all pears grown on the Pacific Coast except the Bartlett varieties. In Eastern and Southern States, the production of all pears includes, besides the Bartlett and fall and winter pear varieties, the Kieffer and miscellaneous other varieties which are used extensively for canning and home preserves.

and Washington 31 per cent. The Beurre Bosc variety accounts for 21 per cent of the late pear acreage on the West Coast. Over one-half, or 58 per cent, is grown in Oregon where the Medford District with about 2,660 acres has 44 per cent of the total acreage on the Pacific Coast. In California where 22 per cent of the Bosc acreage is located, the Sacramento Valley-Foothill District is the major producing area. In Washington the Yakima District is most important in Bosc production, the state as a whole, however, has only 20 per cent of the total Bosc acreage. The Winter Nelis variety is the third in size of plantings, amounting to 15 per cent of the total acreage of pears on the Pacific Coast. Except for the Beurre Hardy variety, it is the most important late pear grown in California. This state with 42 per cent of the total leads the others in acreage of Winter Nelis pears. Washington with 36 per cent of the total follows in extent of plantings which are confined almost exclusively to the Yakima District. In Oregon where 22 per cent of the acreage of Winter Nelis pears is located nearly all of the plantings are in the Medford District. The acreage of the Comice variety, amounting to 6 per cent of the total, is concentrated in the Santa Clara Valley District of California and the Medford District of Oregon. Other districts on the Pacific Coast are unimportant in Comice production. The percentage distribution of this variety by states is California 51 per cent, Oregon 46 per cent, and Washington 3 per cent.

Marketing Season

The marketing period of West Coast fall and winter pears extends from August of one year to June of the following year. The season begins with the marketing of California Hardy pears during the early part of August and ends in June with the sales of Winter Nelis pears.

California ships late pears before the movement of similar varieties from other states begins. The Beurre Hardy pear, although the first variety to be harvested and marketed during the second half of the Bartlett season, is of minor importance with regard to the marketing of late varieties in domestic markets. Normally between 90 and 95 per cent of the shipments are destined to foreign markets, chiefly to Great Britain. Domestic shipments of California d'Anjou, Beurre Bosc, Comice, and Winter Nolis pears reach the market before the same varieties from Oregon and Washington are ready to be shipped. Beginning gradually in the middle of August, California's domestic shipments reach their peak for the season early in October when the shipments of Washington and Oregon late pears are heavy but have not reached their peak.

Domestic shipments of late pears from Oregon and Washington begin approximately at the end of August or early in September. The peak is reached between the 1st and 15th of November, about one month after California shipments have reached their maximum. In contrast to the movement of Bartlett pears, West Coast late pear varieties are marketed during every month of the year with the possible exception of July. The major part moves into consumption channels shortly after harvest. The remainder of the crop is stored and marketed during the period from November to June.

The storage life of late pears and consequently the marketing season varies considerably by varieties. The Beurre Hardy variety from California is marketed immediately following harvest and not held in storage after October. The Beurre Bosc variety is marketed between September and January and only in years of large crops do sales extend into February and March. The storage life of this variety, however, does not permit to hold them with-

out serious losses after January. The Conice is another variety which has a comparatively limited storage life. Its season extends from the beginning of November to the end of January. The variety having the best keeping quality and extending its marketing season over the longest period is the d'Anjou variety. The marketing season extends from November 1st into May of the following year. The Winter Nelis variety is not ready for consumption before the beginning of December and is the last of the major varieties sold at the end of the winter pear marketing season. The Bourre Bosc and Winter Nelis varieties require special ripening after being removed from cold storage.

With respect to the export season for Pacific Coast fall and winter pears, records indicate that, in contrast to the period of domestic shipments, exports after December are small in volume. Increasing competition from unstored fresh pears originating in Australia, New Zealand, and South American countries during the first half of the year and appearing in increasing volume at the major export markets makes the sale of Pacific Coast fall and winter pears at prices satisfactory to the industry difficult after January. Except for Winter Nelis exports which begin in September and continue in volume until January, the major export season lasts from August until the end of November. September is the peak export month of the season for the d'Anjou, Bourre Bosc and Conice varieties. Exports of Hardy pears are heaviest during August and early September, and those of Winter Nelis are greatest during October and November.

Total Shipments by Major Varieties

Production of other than Bartlett pears as reported by the Bureau of

Agricultural Economics on the average of the three-year period 1935 to 1937 amounted to 4,619,000 bushels. Reports of shippers to the General Crops Section covering the same period represent a total of 3,879,486 boxes of late pears shipped to domestic and foreign markets. Disregarding the slight variations between the net weight of a bushel of pears and that of a standard box, shippers' reports cover approximately 84 per cent of the estimated production. In view of the fact that not all of the pears are of a sufficiently high grade to be shipped into interstate commerce and that an appreciable volume of pears consumed in the producing states is not reported, it is believed that shippers' reports are sufficiently complete to draw final conclusions with regard to the interstate movement of late pears and their distribution on the average of the 1935-36 to 1937-38 seasons.

A summary of reports of shipments into domestic and export markets by individual seasons and on the average of the 1935-36 to 1937-38 seasons by districts is presented in table I. Of the total shipments 21 per cent originated in California, 46 per cent in Oregon, and 33 per cent in Washington. Over half of the total shipments from California and Washington were sold in export markets, while most of the late pears shipped from Oregon were sold in domestic markets. Of the total Pacific Coast shipments of late pears on the average of the three seasons, nearly 45 per cent were marketed in foreign countries.

Fall and winter pear shipments by major varieties during individual seasons and the average of the three seasons are shown in table II. Shipments of d'Anjou pears are by far the largest, followed by Bosc and Winter Nelis pears, amounting to almost 21 per cent and 18 per cent, respectively,

Table I

Shipments of Pacific Coast Fall and Winter Pears by Major Regions

Seasons 1935-36 to 1937-38

	: California :	: Medford District :	: Hood River District :	: Yakima District /1 :	: Wenatchee District :	: Total Pacific Coast :
	1	2	3	4	5	6
	boxes	boxes	boxes	boxes	boxes	boxes
<u>1935-36 Season</u>						
Total	587,940	1,033,318	635,562	988,727	335,667	3,581,214
Domestic	220,318	821,660	373,315	313,541	243,604	1,972,438
Export	367,622	211,658	262,247	675,186	92,063	1,608,776
<u>1936-37 Season</u>						
Total	1,182,022	1,125,178	590,735	747,947	334,826	3,980,708
Domestic	438,776	817,073	402,300	357,216	195,048	2,210,413
Export	743,246	308,105	188,435	390,731	139,778	1,770,295
<u>1937-38 Season</u>						
Total	663,006	1,103,919	929,147	934,175	446,288	4,076,535
Domestic	225,610	869,315	521,587	351,178	282,386	2,250,076
Export	437,396	234,604	407,560	582,997	163,902	1,826,459
<u>Average 1935-36 to 1937-38 Seasons</u>						
Total	810,989	1,087,472	718,482	890,283	372,260	3,879,486
Domestic	294,901	836,016	432,401	340,645	240,346	2,144,309
Export	516,088	251,456	286,081	549,638	131,914	1,735,177
<u>Percentage of Pacific Coast, Average 1935-36 to 1937-38 Seasons</u>						
Total	20.9	28.0	18.5	23.0	9.6	100.0
Domestic	13.7	39.0	20.2	15.9	11.2	100.0
Export	29.7	14.5	16.5	31.7	7.6	100.0
<u>Percentage Exported by Major Regions, Av. 1935-36 to 1937-38 Seasons</u>						
	68.6	28.1	39.8	61.7	35.4	44.7

/1. Includes Underwood-White Salmon District.

Source of data: Shippers' Reports to the General Crops Section, Division of Marketing and Marketing Agreements, U. S. Dept. Of Agriculture.

Table II

Shipments of Pacific Coast Fall and Winter Pears by Major Varieties

Seasons 1935-36 to 1937-38

Variety	Season		Average		Per cent of all Varieties 1935-1937 Average	Per cent Exported 1935-1937 Average
	1935-36	1936-37	1937-38	1935-36 to 1937-38 Seasons		
	1	2	3	4	5	6
	boxes	boxes	boxes	boxes	per cent	per cent
Hardy	221,495	439,832	249,034	303,454	7.8	88.7
Bosc	568,023	860,055	1,053,308	827,129	21.3	12.1
Anjou	1,603,243	1,353,198	1,806,164	1,587,535	40.9	42.9
Winter Nelis	666,160	752,985	678,146	699,097	18.0	73.4
Comice	122,534	270,120	122,506	171,720	4.4	65.3
Others	147,327	294,518	167,377	203,074	5.3	20.6
Unknown	252,432	10,000	--	87,477	2.3	19.5
Total All Varieties	3,581,214	3,980,708	4,076,535	3,879,486	100.0	44.7

Source of data: Shippers' Reports to the General Crops Section, Division of Marketing and Marketing Agreements, U. S. Dept. of Agriculture.

of all shipments reported. Shipments of Hardy pears accounted for 8 per cent of the total and those of Comice pears for 4 per cent. With regard to the export shipments of the individual varieties, it is indicated that 89 per cent of the Hardy pears, 73 per cent of the Winter Nelis, 65 per cent of the Comice, 43 per cent of the Anjou, and 12 per cent of the Bosc pears grown on the Pacific Coast are sold in foreign markets.

The average shipments of late pears during the 1935-36 to 1937-38 seasons by district of origin are given in table III. While all Hardy pears are shown to originate in California, the major portion of the d'Anjou variety is shipped from Oregon and Washington. Over half of the Winter Nelis shipments originated in the Yakima District of Washington while the remaining shipments came from California and the Medford District in Oregon. Two-thirds of the Bosc pears were shipped from Oregon with the Medford District the most important source. Comice pears are shown to originate almost exclusively in California and the Medford District in Oregon. For all varieties of late pears combined, the sources in order of their importance are: the Medford District in Oregon, the combined districts in California, the Yakima District in Washington, the Hood River District in Oregon, and finally the Wenatchee District in Washington.

Domestic Shipments and Major Markets

It has been indicated above that approximately 65 per cent of all shipments of late pear varieties during the past three seasons were sold in domestic markets. The proportions of the major varieties marketed domestically during the 1935 to 1937 seasons are Beurre Bosc 88 per cent, d'Anjou 57 per cent, du Comice 35 per cent, Winter Nelis 27 per cent, and Beurre

Table III

Average Shipments of Pacific Coast Fall and Winter Pears
During the 1935-36 to 1937-38 Seasons
by Major Varieties and Regions

Variety	California	Medford District	Hood River District	Yakima District/1	Wenatchee District	Total Pacific Coast
	1	2	3	4	5	6
	boxes	boxes	boxes	boxes	boxes	boxes
Hardy	303,437	--	--	17	--	303,454
Bosc	94,547	404,467	124,704	105,429	97,982	827,129
Anjou	36,182	450,664	553,667	338,227	208,795	1,587,535
Winter Nelis	157,917	127,254	11,623	395,545	6,758	699,097
Comice	89,688	76,195	3,903	935	999	171,720
All Others	77,207	28,892	24,585	33,570	38,820	203,074
Unknown	52,011	--	--	16,560	18,906	87,477
Total all Varieties	810,989	1,087,472	718,482	890,283	372,260	3,879,486
Per cent of Pacific Coast						
	per cent	per cent	per cent	per cent	per cent	per cent
Hardy	99.9	--	--	.1	--	100.0
Bosc	11.4	48.9	15.1	12.8	11.8	100.0
Anjou	2.3	28.4	34.9	21.3	13.1	100.0
Winter Nelis	22.6	18.2	1.6	56.6	1.0	100.0
Comice	52.2	44.4	2.3	.5	.6	100.0
All Others	38.0	14.2	12.1	16.6	19.1	100.0
Unknown	59.5	--	--	18.9	21.6	100.0
Total all Varieties	20.9	28.0	18.5	23.0	9.6	100.0

/1. Includes Underwood-White Salmon District.

Source of data: Shippers' Reports to the General Crops Section, Division of
Marketing and Marketing Agreements, U. S. Dept. of Agr.

Hardy 11 per cent.

The total domestic shipments on the average of the 1935-36 to 1937-38 seasons amounted to 2,144,000 boxes of which over 88 per cent were shipped to a group of 18 states including the District of Columbia. As shown in table IV, over one-half of all domestic shipments were destined to the state of New York. Other important markets in this group from the viewpoint of total volume sold are in the states of Pennsylvania, Illinois, and Massachusetts.

A group of 17 Central and Southern States received only 5 per cent of all domestic shipments, while reports of shipments to Western States accounted for nearly 5 per cent of the total.

Relating shipments of late pears to the population in cities of 10,000 inhabitants and over, it is shown in table V that the Northeastern States received 46 boxes per 1,000 persons of urban population, while shipments to Central and Southern States amounted to an average of 9.2 boxes per 1,000 of urban population. The state of New York with an average of 109 boxes per 1,000 of urban population is the largest domestic market for fall and winter pears. The average shipments for the country as a whole amounted to nearly 37 boxes per 1,000 persons living in cities of 10,000 inhabitants or over.

Export Shipments and Major Markets

Nearly 45 per cent of all shipments of Pacific Coast fall and winter pears on the average of the three seasons 1935-36 to 1937-38 were sold in foreign countries. As shown in table VI, the total volume of export shipments amounted to 1,735,000 boxes. The European countries are the largest

Table IV
Domestic Shipments of Pacific Coast Fall and Winter Pears by States
of Destination, Seasons 1935-36 to 1937-38

Destination	1935-36	1936-37	1937-38	Average 1935-36 to 1937-38 Seasons	Per cent of Total Dom. Shipments Av. 1935-36 to 1937-38
	1	2	3	4	5
	boxes	boxes	boxes	boxes	per cent
Maine	720	1,490	720	976	.05
Vermont	--	--	--	--	--
Massachusetts	133,184	115,851	104,626	117,887	5.50
Rhode Island	4,320	7,856	3,608	5,261	.25
Connecticut	37,440	33,092	20,236	30,256	1.41
New York	1,048,297	1,021,864	1,189,248	1,086,470	50.67
Pennsylvania	204,060	292,855	263,521	253,479	11.82
New Jersey	1,440	6,480	3,544	3,821	.18
Maryland	13,826	21,211	36,925	23,987	1.12
Dist. of Columbia	28,753	28,040	24,026	26,940	1.25
Virginia	2,749	3,956	6,697	4,467	.21
West Virginia	1,070	2,810	1,526	1,802	.08
Ohio	28,872	52,977	48,378	43,409	2.02
Kentucky	--	1,880	856	912	.04
Indiana	--	--	--	--	--
Illinois	174,677	248,030	237,179	219,962	10.26
Michigan	57,327	47,391	36,842	47,187	2.20
Wisconsin	21,642	34,566	28,818	28,342	1.32
Tot. N.E. States	1,758,377	1,920,349	2,006,750	1,895,158	88.38
North Carolina	2,319	5,891	2,420	3,544	.16
South Carolina	720	2,425	2,330	1,825	.09
Tennessee	5,580	6,469	3,405	5,151	.24
Georgia	3,880	6,534	6,803	5,739	.27
Alabana	5,158	8,004	2,928	5,364	.25
Florida	14,070	12,368	14,930	13,790	.64
Minnesota	4,666	22,793	9,612	12,357	.58
North Dakota	907	877	10	598	.03
South Dakota	25	--	--	8	/1
Iowa	1,540	3,625	754	1,973	.09
Nebraska	2,450	2,477	5,798	3,575	.17
Kansas	72	2,114	718	968	.05
Missouri	13,844	45,868	19,267	26,326	1.23
Arkansas	1,240	1,288	1,010	1,179	.05
Oklahoma	1,652	3,003	1,655	2,103	.10
Louisiana	7,600	9,440	5,746	7,595	.35
Texas	6,372	16,131	8,467	10,323	.48
Tot. Cen. & South.	72,095	149,307	85,853	102,418	4.78
Western States	87,760	110,313	107,734	101,936	4.75
Unknown	54,206	30,444	49,739	44,797	2.09
Tot. all Shipments	1,972,438	2,210,413	2,250,076	2,144,309	100.00

/1. Less than .01 per cent.

Source of data: Shippers' Reports to General Crops Section, Div. of Marketing & Marketing Agreements, U. S. Dept. Agr.

Table V

Domestic Shipments of Pacific Coast Fall and Winter Pears
to Specified States in Relation to Urban Population
Average 1935-36 to 1937-38 Seasons

State of Destination	Av. 1935-36 to 1937-38 Shipments	Population in Cities of 10,000 & Over (Urban pop.)	Av. 1935-36 to 1937-38 Shipments per 1,000 of Urban Population
	1	2	3
	<u>boxes</u>	<u>1,000 persons</u>	<u>boxes</u>
New York	1,086,470	9,935	109.4
District of Columbia	26,940	487	55.3
Pennsylvania	253,479	5,262	48.2
Illinois	219,962	4,969	44.3
Massachusetts	117,887	3,505	33.6
Connecticut	30,256	1,082	28.0
Wisconsin	28,342	1,283	22.1
Maryland	23,987	911	26.3
Michigan	47,187	2,934	16.1
Rhode Island	5,261	602	8.7
Vermont	---	53	---
Ohio	43,409	3,916	11.1
Maine	976	228	4.3
Virginia	4,467	637	7.0
West Virginia	1,802	344	5.2
Other States	3,293	5,236	.6
Northeastern States	1,895,158	41,384	45.8
Florida	13,790	559	24.7
Missouri	26,326	1,584	16.6
Minnesota	12,357	997	12.4
Louisiana	7,595	660	11.5
Tennessee	5,151	704	7.3
Alabama	5,364	580	9.2
North Dakota	598	73	8.2
Georgia	5,739	666	8.6
North Carolina	3,544	593	6.0
South Carolina	1,825	235	7.8
Nebraska	3,575	368	9.7
Texas	10,323	1,799	5.7
Other States	6,231	2,361	2.6
Central & Southern States	102,418	11,179	9.2
Western & Unspecified States	146,733	5,764	25.5
Total Shipments Reported	2,144,309	58,327	36.8

Source of data: Col. 1; Shippers' Reports to the General Crops Section.
Col. 2; U. S. Dept. of Commerce, 1935 Census.
Col. 3; Column 1 divided by column 2.

Table VI

Export Shipments of Pacific Coast Fall and Winter Pears
by Major Countries and Continents of Destination
Seasons 1935-36 to 1937-38

Destination	Season			Average 1935-36 to 1937-38 Seasons	Per cent of Total Export Shipments Av. 1935-36 to 1937-38
	1935-36	1936-37	1937-38		
	1	2	3	4	5
	boxes	boxes	boxes	boxes	per cent
British Isles	744,777	800,378	750,780	765,311	44.1
France	325,642	290,625	339,265	318,511	18.3
Holland	123,984	125,983	173,446	141,138	8.1
Sweden	121,215	92,969	149,096	121,093	7.0
Other Europe	35,536	67,144	93,273	65,318	3.8
Europe	1,351,154	1,377,099	1,505,860	1,411,371	81.3
Palestine	17,120	27,533	21,302	21,985	1.3
Other Asia	9,978	8,674	12,284	10,312	.6
Asia	27,098	36,207	33,586	32,297	1.9
Egypt	36,899	38,021	74,954	49,958	2.8
Other Africa	560	3,920	9,540	4,673	.3
Africa	37,459	41,941	84,494	54,631	3.1
Brazil	44,522	20,480	49,680	38,227	2.2
Canada	20,817	18,275	18,106	19,066	1.1
Cuba	18,515	18,080	25,247	20,614	1.2
Other Western Hemisphere	33,037	56,689	18,676	36,134	2.1
Western Hemisphere	116,891	113,524	111,709	114,041	6.6
U. S. Island Possessions	2,300	828	6,423	3,184	.2
Unknown	73,874	200,696	84,387	119,652	6.9
Total All Export Shipments	1,608,776	1,770,295	1,826,459	1,735,176	100.0

Source of data: Shippers' Reports to the General Crops Section, Division of Marketing and Marketing Agreements, U. S. Dept. of Agriculture.

foreign outlet for late pear varieties, taking 81 per cent of the total export volume. The British Isles and France are the most important markets, comparatively large quantities have also been shipped to Holland and Sweden. Of the export shipments destined to Asia only those to Palestine are of any significance, while another country on the Mediterranean, namely, Egypt, is the largest receiver of late pears on the African continent. Of shipments to the Western Hemisphere, Brazil, Cuba, and Canada receive the major volume in the order named.

A comparatively large volume of export shipments was reported for which the destination is unknown. This is due to the fact that many shippers without foreign connections, selling f.o.b. or f.a.s. to export brokers, know only the port of export but not the final destination of their shipment.

New York Auction Prices of Pacific Coast Fall and Winter Pears

New York auction sales of Pacific Coast fall and winter pears on the average of the 1935-36 to 1937-38 seasons amounted to 1,133,000 boxes. This volume sold in a single market is 25 per cent of the average crop for the same period, 29 per cent of the total shipments, and 53 per cent of the domestic shipments as reported by Pacific Coast shippers for these three seasons.

The large volume of late pears sold at the New York auction make prices received in this market a fairly reliable indicator of the domestic price level. This is especially true for those varieties of which a large portion is normally sold in domestic markets rather than exported. Shipping records indicate that nearly all of the Beurre Bosc pears and over half of the d'Anjou pears were shipped to domestic markets, while Comice and Winter Nelis pears are sold predominantly in export markets. New York auction prices

of Beurre Hardy pears after allowing for marketing charges, cannot be considered to reflect prices received by growers for their Hardy crop accurately, even though they are representative of prices received for the small portion of the crop which is sold domestically.

Total sales and season weighted average prices of West Coast late pears at the New York auction for the period 1926 to 1938 are shown in table VII. The volume of sales of Pacific Coast late pears on the average of the 1933 to 1937 season was 18 per cent below the sales volume for the preceding five-year period. Prices received for all varieties of Pacific Coast fall and winter pears during the five seasons 1933 to 1937 averaged 19 per cent below prices received for the period 1928 to 1932. The reduction in prices of California late pears was 16 per cent, of Oregon pears 20 per cent, and of Washington pears 19 per cent over the same period.

The domestic price trend of the major varieties of late pears by states of origin for a period of years for which records are available are given in tables VIII, IX, and X. After a slight recovery of prices during the 1936 season a great price drop occurred during the 1937 season which affected all varieties but particularly those marketed late in the season. Season average prices in 1937 for most varieties were only one-half of the average price received prior to the 1928 season. Prices received through April in the 1938-39 season, except for California pears, have been somewhat above those received in the 1937 season.

Net Returns to Growers

During the 1937 season an attempt was made to obtain data with regard to the returns to growers from sales of the major varieties and grades of

Table VII

New York Auction Sales and Weighted Average Prices of Pacific Coast

Fall and Winter Pears by States of Origin, 1926-1938

Season	California			Oregon			Washington			Total Pacific Coast		
	Sales	Price		Sales	Price		Sales	Price		Sales	Price	
	1	2	3	4	5	6	7	8				
	boxes	dollars per box	boxes	dollars per box	boxes	dollars per box	boxes	dollars per box		boxes	dollars per box	
1926	368,458	2.95	440,946	3.41	340,411	2.72	1,149,815	3.06		1,149,815	3.06	
1927	213,618	3.69	503,472	4.34	208,039	3.77	925,129	4.06		925,129	4.06	
1928	440,804	2.90	801,962	3.52	301,335	2.78	1,544,101	3.20		1,544,101	3.20	
1929	315,677	3.30	760,134	3.64	243,887	2.97	1,319,698	3.44		1,319,698	3.44	
1930	431,252	2.14	841,398	2.47	216,105	2.12	1,488,755	2.32		1,488,755	2.32	
1931	335,964	2.45	554,182	3.00	281,135	2.52	1,171,281	2.73		1,171,281	2.73	
1932	245,226	1.68	606,839	1.85	193,848	1.51	1,045,913	1.75		1,045,913	1.75	
1933	226,267	1.83	465,528	2.36	215,585	1.91	907,380	2.12		907,380	2.12	
1934	395,739	2.18	460,180	2.40	227,051	2.11	1,082,970	2.26		1,082,970	2.26	
1935	112,256	2.00	733,675	2.20	245,509	1.78	1,091,440	2.08		1,091,440	2.08	
1936	214,807	2.32	645,427	2.70	293,187	2.04	1,153,421	2.46		1,153,421	2.46	
1937	112,780	2.10	757,870	1.95	282,646	1.75	1,153,296	1.91		1,153,296	1.91	
1938/1	191,533	1.84	727,428	2.10	306,871	1.83	1,225,832	1.98		1,225,832	1.98	
Av. 1928-1932	353,785	2.49	712,903	2.90	247,262	2.38	1,313,950	2.69		1,313,950	2.69	
Av. 1933-1937	212,370	2.08	612,536	2.32	252,795	1.92	1,077,701	2.17		1,077,701	2.17	

/1. To May 1, 1939.

Source of data: U. S. Dept. Agr., Bur. Agr. Econ., Division of Statistical and Historical Research.

Table VIII

New York Auction Prices of Four Major Varieties of California Fall and Winter Pears

Seasons 1920-1938

Season	d'Anjou		Beurre Bosc		Winter Nelis		du Comice	
	Weighted Average Price	Index 1920-28 = 100	Weighted Average Price	Index 1920-28 = 100	Weighted Average Price	Index 1920-28 = 100	Weighted Average Price	Index 1920-28 = 100
	1	2	3	4	5	6	7	8
	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent	dollars per box	per cent
1920	3.97	113	6.20/1	148	4.25	120	4.82/1	136
1921	3.85	110	4.87	116	3.78	106	4.06	114
1922	2.85	81	4.09	97	2.96	83	2.96	83
1923	3.04	87	3.59	86	3.61	109	3.24	91
1924	3.94	113	4.44	106	4.28	127	4.07	115
1925	3.38	97	4.15	99	3.57	101	3.38	95
1926	3.05	87	3.31	79	2.97	84	2.94	83
1927	4.10	117	4.17	99	3.49	98	4.04	114
1928	3.01	86	3.17	76	2.80	79	3.16	89
Average 1920-28	3.50	100	4.20	100	3.55	100	3.55	100
1929	3.44	98	3.68	88	3.05	86	3.53	99
1930	2.38	68	2.38	57	2.11	59	2.37	67
1931	2.87	82	2.65	63	2.20	62	2.94	83
1932	1.72	49	1.71	41	1.48	41	1.75	49
1933	2.10	60	1.68	40	2.24	63	1.91	54
1934	2.51	72	2.07	49	2.13	60	2.40	68
1935	1.90	54	1.96	47	1.89	53	2.34	66
1936	2.41	69	2.15	51	2.44	69	2.30	65
1937	1.93	55	1.96	47	1.71	48	2.51	71
1938/2	1.78	51	1.74	41	1.79	50	1.94	55

/1. Less than 1,000 boxes sold.

/2. To May 1, 1939.

Source of data: New York Daily Fruit Reporter, 1920-21, Compiled by Economic Analysis Unit, General Crops Section, 1922-35, Compiled by S. W. Shear, Giannini Foundation, Univ. of Calif., 1936-37, Bur. Agr. Econ., Division of Statistical and Historical Research, 1938, Economic Analysis Unit, General Crops Section.

Table IX

New York Auction Prices of Four Major Varieties of Oregon Fall and Winter Pears

Seasons 1922-1938

Season	d'Anjou			Beurre Bosc			Winter Nelis			du Comice		
	Weighted	Index	per cent	Weighted	Index	per cent	Weighted	Index	per cent	Weighted	Index	per cent
	Average	1922-28		Average	1922-28		Average	1922-28		Average	1922-28	
	Price	= 100		Price	= 100		Price	= 100		Price	= 100	
	1	2	3	4	5	6	7	8				
	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars
	per box	per box	per box	per box	per box	per box	per box	per box	per box	per box	per box	per box
1922	3.37	85	3.83	96	2.58	78	2.89	84				
1923	3.48	88	4.17	105	3.14	95	2.99	87				
1924	4.70	119	4.72	119	4.27	129	3.88	113				
1925	4.01	102	4.23	107	3.69	111	3.75	109				
1926	3.64	92	3.28	83	2.82	85	3.13	91				
1927	4.64	117	4.29	108	3.58	108	4.09	119				
1928	3.82	97	3.28	83	3.15	95	3.26	95				
Av. 1922-1928	3.95	100	3.97	100	3.32	100	3.43	100				
1929	3.73	94	3.58	900	2.69	81	3.55	103				
1930	2.70	68	1.96	49	2.23	67	2.59	76				
1931	3.22	82	2.94	74	2.05	62	2.92	85				
1932	1.99	50	1.74	44	1.93	58	1.78	52				
1933	2.75	70	1.94	49	2.48	75	2.41	70				
1934	2.71	69	2.27	57	2.49	75	2.21	64				
1935	2.20	56	2.33	59	1.92	58	2.06	60				
1936	3.14	79	2.41	61	2.88	87	2.40	70				
1937	2.02	51	1.92	48	1.88	56	1.99	58				
1938/1	2.28	58	2.01	51	1.98	60	1.95	57				

/1. To May 1, 1939.

Source of data: New York Daily Fruit Reporter, 1922-1935, compiled by S. W. Shear, Giannini Foundation, Univ. of California; 1936-1938, Economic Analysis Unit, General Crops Section.

Table X

New York Auction Prices of Four Major Varieties of Washington Fall and Winter Pears

1926-1938

Season	d'Anjou			Beurre Bosc			Winter Nelis			du Comice		
	Weighted Average Price	Index 1926-29 = 100		Weighted Average Price	Index 1926-29 = 100		Weighted Average Price	Index 1926-29 = 100		Weighted Average Price	Index 1926-29 = 100	
	1	2		3	4		5	6		7	8	
	dollars per box	per cent		dollars per box	per cent		dollars per box	per cent		dollars per box	per cent	
1926	3.76	98		3.22	94		2.24	93		2.56	85	
1927	4.64	121		4.25	124		3.01	125		3.47	116	
1928	3.33	87		3.18	93		2.26	94		2.69	89	
1929	3.56	93		3.04	89		2.08	87		3.26	109	
Av. 1926-1929	3.82	100		3.42	100		2.40	100		3.00	100	
1930	2.48	65		1.73	51		1.66	69		1.87	62	
1931	3.05	80		2.44	71		1.78	74		2.36	79	
1932	1.75	46		1.34	39		1.10	46		1.08	36	
1933	2.14	56		1.60	47		1.49	62		1.54	51	
1934	2.33	61		1.84	54		1.55	65		1.56	52	
1935	1.90	50		1.66	49		1.30	54		1.36	45	
1936	2.34	61		1.91	56		1.53	64		1.54	51	
1937	1.85	48		1.43	42		1.33	55		1.78	50	
1938/1	1.97	52		1.63	48		1.42	59		1.55	52	

/1. To May 1, 1939.

Source of data: New York Daily Fruit Reporter, 1926-1937, U. S. Dept. Agr., Bur. Agr. Econ., Div. of Statistical and Historical Research, 1938, Economic Analysis Unit, General Crops Section.

fall and winter pears. Shippers, particularly those who pool their returns to growers, reported the volume of the fruit packed and the prices paid to growers. Thus, the return to growers represents the net return after all expenses except those incurred by the grower have been paid; in other words, it is the return for bare fruit delivered to the packing house on a packed box basis.

While representative samples of returns to growers were obtained in most districts for the seasons 1929 to 1936, only few shippers still possessed their records for seasons prior to 1929. The sample for earlier years, therefore, is not believed to be sufficiently large to permit a presentation of returns to growers by grades. Table XI gives the volume of fruit and the corresponding weighted average prices received by growers for all grades of d'Anjou, Beurre Bosc, and Winter Nelis pears grown in the Medford District of Oregon during the years 1919 to 1937. Returns to growers for these major varieties prior to the 1929 season averaged around \$2.00 or over. Beginning with the 1930 season, growers experienced a drastic reduction in their income which reached the lowest point in 1932. Returns since then have fluctuated somewhat but never returned to the level of prices prior to 1929. Prices received in the 1937 season approached those of 1932. Prices of d'Anjou pears, which for the years prior to 1929 averaged below prices of Beurre Bosc pears, have not dropped as low as those of Beurre Bosc pears. Returns from Medford Winter Nelis averaged below the returns from d'Anjou and Beurre Bosc pears except during the period 1933 to 1937 when they were slightly above returns from sales of Bosc pears.

In the state of Washington, net returns to growers have generally been lower than those in the Medford District of Oregon. Table XII presents the

Table XI

Net Returns to Growers/¹ for d'Anjou, Beurre Bosc and Winter Nelis Pears Grown in the Medford District of Oregon
1919 to 1937 Season

Crop Year	d'Anjou		Beurre Bosc		Winter Nelis	
	Boxes	Wtd. Av.	Boxes	Wtd. Av.	Boxes	Wtd. Av.
		Price		Price		Price
		All Grades		All Grades		All Grades
	1	2	3	4	5	6
	number	dollars per box	number	dollars per box	number	dollars per box
1919	16,364	2.832	15,866	3.433	5,284	2.262
1920	14,597	2.758	15,582	3.517	4,745	1.913
1921	15,350	2.164	16,196	2.853	4,887	1.446
1922	13,981	2.182	14,188	2.598	4,216	1.336
1923	25,151	1.658	12,917	2.581	14,273	1.777
1924	12,720	2.938	15,526	2.803	10,370	2.447
1925	21,393	2.101	11,334	2.401	10,191	2.163
1926	22,689	1.464	28,982	1.327	13,957	1.502
1927	28,542	2.591	18,459	2.558	18,061	2.443
1928	169,671	1.712	169,493	1.353	61,090	1.173
1929	123,729	2.265	121,194	1.747	60,041	.944
1930	172,170	.903	141,692	.104	64,165	.308
1931	98,570	1.441	116,544	1.059	35,769	.426
1932	201,148	.468	148,392	.049	58,021	.244
1933	263,815	1.088	220,107	.307	62,589	.722
1934	295,918	1.161	285,540	.548	67,203	.697
1935	366,341	.576	323,886	.629	92,345	.240
1936	291,661	1.225	356,076	.721	123,991	.988
1937	259,918	.589	300,715	.278	91,941	.282

¹ Net returns to growers for bare fruit delivered to the packing house on a packed box basis.

Source of data: Compiled from records of major shippers and packers by Economic Analysis Unit, General Crops Section.

Table XII

Net Returns to Growers/1 for d'Anjou, Beurre Bosc and
Winter Nelis Pears Grown in the State of Washington
1919 to 1936 Season

Crop Year	d'Anjou		Beurre Bosc		Winter Nelis	
	Boxes	Wtd. Av. Price All Grades	Boxes	Wtd. Av. Price All Grades	Boxes	Wtd. Av. Price All Grades
	1 number	2 dollars per box	3 number	4 dollars per box	5 number	6 dollars per box
1919	10,768	2.571	286	3.244	23,410	1.759
1920	11,666	2.170	792	2.116	24,812	.696
1921	11,866	1.991	486	1.753	24,250	1.051
1922	9,742	1.397	488	1.678	27,635	.647
1923	26,120	1.351	718	1.747	42,185	.900
1924	15,112	2.293	1,221	2.752	14,181	1.609
1925	22,647	2.088	1,127	2.196	21,864	.645
1926	51,772	1.347	3,927	1.331	71,627	.584
1927	23,860	2.507	1,886	2.561	40,244	1.229
1928	72,840	1.650	8,160	1.512	121,875	.490
1929	65,734	2.076	4,899	1.670	80,260	.855
1930	107,082	.990	15,332	.407	130,749	.317
1931	86,982	1.023	16,152	.694	91,389	.375
1932	114,682	.699	16,105	.022	62,989	.065
1933	191,922	.699	14,540	.193	72,698	-.407
1934	248,780	.859	53,549	.372	140,936	.197
1935	329,978	.642	38,844	.347	194,065	.254
1936	235,383	.808	54,430	.497	137,703	.289

/1. Net returns to growers for bare fruit delivered to the packing house on a packed box basis.

Source of data: Compiled from records of major shippers and packers by Economic Analysis Unit, General Crops Section.

volume and net returns for d'Anjou, Beurre Bosc, and Winter Nelis varieties grown in the state of Washington. The trend in returns from season to season is about the same as shown for Medford pears. Returns for the individual varieties during the three-year period 1934-1936, however, are from \$0.20 to \$0.40 below returns to growers in the Medford District.

Similar information, as given here for Medford and Washington winter pears, is not as yet available for other pear producing districts of the Pacific Coast.

Net returns to growers, as calculated from New York auction sales during the 1938-39 season to May 1, are presented in table XIII for the d'Anjou, Beurre Bosc, and Winter Nelis varieties by state of origin and grades sold. Data presented relates to the whole of the marketing season for the Beurre Bosc variety and all but a minor part of the d'Anjou season. Returns for Winter Nelis pears relate to the earlier part of the selling season for that variety as a large proportion of sales in New York are made after May 1. Oregon d'Anjou pears of U. S. No. 1 and Extra Fancy grades netted the grower \$0.66 per box, while the Extra Fancy grade of the same variety from Washington returned \$0.37 per box to the grower out of which the cost of production and harvesting had to be paid. Oregon Bosc pears returned \$0.28 per box on the average for all grades while Washington Bosc sold at an average loss of \$0.05 per box. Oregon Winter Nelis returned \$0.25 per box to the grower, while the sales of Washington Winter Nelis sold at the New York auction market resulted in a loss to the grower. Washington Winter Nelis which exceed those grown in Oregon in volume of production are almost all sold in foreign markets.

Table XIII

Season's Average Net Returns/¹ From New York Auction Sales of Oregon and Washington d'Anjou, Beurre Bosc, and Winter Nelis Pears by Grades 1938-39 Season/²

Grades	Number of Boxes Sold	Net Returns		Percentage by Grades	
		Total	Per Box	Number of Boxes Sold	Net Returns
	1	2	3	4	5
	number	dollars	dollars	per cent	per cent
<u>Oregon Anjou</u>					
U. S. No. 1	2,179	1,438	.66	0.8	1.0
Extra Fancy	147,572	97,398	.66	54.1	65.4
Fancy	102,189	50,073	.49	37.5	33.6
Unclassified	20,632	--	--	7.6	--
All Grades	272,572	148,909	.55	100.0	100.0
<u>Washington d'Anjou</u>					
Extra Fancy	114,857	42,497	.37	55.8	78.0
Fancy	58,149	11,630	.20	28.3	21.4
Unclassified	32,803	328	.01	15.9	.6
All Grades	205,809	54,455	.26	100.0	100.0
<u>Oregon and Washington d'Anjou</u>					
U. S. No. 1	2,179	1,438	.66	0.5	.7
Extra Fancy	262,429	139,087	.53	54.8	68.8
Fancy	160,338	60,928	.38	33.5	30.2
Unclassified	53,435	534	.01	11.2	.3
All Grades	478,381	201,987	.42	100.0	100.0
<u>Oregon Beurre Bosc</u>					
U. S. No. 1	315,453	94,636	.30	87.1	93.6
Extra Fancy	19,962	4,591	.23	5.4	4.5
Fancy	26,272	2,102	.08	7.3	2.1
Unclassified	720	173	.24	.2	.2
All Grades	362,137	101,156	.28	100.0	100.0
<u>Washington Beurre Bosc</u>					
Extra Fancy	42,347	847	.02	69.5	27.6
Fancy	16,059	1,766	.11	26.4	57.6
Unclassified	2,523	454	.18	4.1	14.8
All Grades	60,929	3,067	.05	100.0	100.0

¹ Net returns in this computation means the returns to growers for bare fruit delivered to the packing house on a packed box basis.

² Season to May 1, 1939.

(Continued)

Table XIII

Season's Average Net Returns/1 From New York Auction Sales of Oregon and Washington d'Anjou, Beurre Bosc, and Winter Nelis Pears by Grades
1938-39 Season/2

(Continued)

Grades	Number of Boxes Sold	Net Returns		Percentage by Grades	
		Total	Per Box	Number of Boxes Sold	Net Returns
	1	2	3	4	5
	number	dollars	dollars	per cent	per cent

Oregon and Washington Beurre Bosc

U. S. No. 1	315,453	94,636	.30	74.6	96.4
Extra Fancy	62,039	3,722	.06	14.7	3.8
Fancy	42,331	423	.01	10.0	.4
Unclassified	3,243	616	.19	.7	.6
All Grades	423,066	98,165	.23	100.0	100.0

Oregon Winter Nelis

U. S. No. 1	6,717	873	.13	14.8	7.8
Extra Fancy	22,053	6,836	.31	48.7	61.2
Fancy	16,497	3,464	.21	36.5	31.0
All Grades	45,267	11,173	.25	100.0	100.0

Washington Winter Nelis

Extra Fancy	18,335	4,400	.24	77.4	70.8
Fancy	5,349	1,819	.34	22.6	29.2
All Grades	23,684	6,219	.26	100.0	100.0

Oregon and Washington Winter Nelis

U. S. No. 1	6,717	873	.13	9.7	18.1
Extra Fancy	40,388	2,423	.06	58.6	50.2
Fancy	21,846	1,529	.07	31.7	31.7
All Grades	68,951	4,825	.07	100.0	100.0

1. Net returns in this computation means returns to growers for bare fruit delivered to the packing house on a packed box basis.
2. Season to May 1, 1939.

The calculations of net returns to growers from New York auction sales of Oregon and Washington d'Anjou, Beurre Bosc, and Winter Nelis pears show that during the 1938-39 season the sales of all pears below the Fancy grade resulted in losses or practically no returns to growers. Prices received for the Fancy grade of Beurre Bosc and Winter Nelis pears on the average, except for Oregon Fancy Winter Nelis pears, were not sufficient to cover costs of harvesting and hauling to the packing house. Only in exceptional cases were the returns to growers during the 1938-39 season for the best grades large enough to cover all costs of production, harvesting, and marketing.

Analyzing further the returns to growers from New York auction sales by grades and size groups, it is shown in tables XIV, XV, and XVI that for the d'Anjou, Beurre Bosc, and Winter Nelis varieties sizes 120 to 180 received higher prices than sizes 110 and larger and those smaller than 180. Lowest returns were received for sizes smaller than 180.

Purchasing Power Parity

Prices received by growers since 1930 have been considerably below the level of prices necessary to give producers of Pacific Coast fall and winter pears a purchasing power per unit comparable to that which prevailed during the base period 1919 to 1928.

During the 1938-39 season the average price received by growers for the major varieties of California late pears, as shown in table XVII, was \$1.05 per box below parity, or in other words, amounted to 10 per cent of the average price necessary to return growers purchasing power per unit equal to that for the period 1920 to 1928. For the 1936-37 season the farm price was 44 per cent of parity.

Table XIV

Season's Average Net Return to Growers/1 from New York Auction
Sales of Oregon and Washington d'Anjou Pears, by Grades
and Size Groups, 1938-39 Season/2

Grades and Size Group	Sales (Number of Boxes)	Percentage		Weighted Average Price per box	Average Marketing Charges /3	Av. Net Re- turn for Fruit Deliv. to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	- number -	- - Per cent - -			- - - dollars - - -	
<u>OREGON d'ANJOU PEARS</u>						
<u>U. S. No. 1</u>						
110 and larger	1,424	65.3	.5	2.35	1.75	.60
120 to 180	747	34.3	.3	2.55	1.77	.78
Smaller than 180	8	0.4	--	2.26	1.75	.51
All Sizes	2,179	100.0	.8	2.42	1.76	.66
<u>Extra Fancy</u>						
110 and larger	112,758	76.4	41.4	2.28	1.74	.54
120 to 180	34,569	23.4	12.7	2.80	1.78	1.02
Smaller than 180	245	0.2	.1	2.45	1.75	.70
All Sizes	147,572	100.0	54.1	2.41	1.75	.66
<u>Fancy</u>						
110 and larger	71,922	70.4	26.4	2.11	1.73	.38
120 to 180	29,561	28.9	10.8	2.52	1.76	.76
Smaller than 180	706	0.7	.3	2.13	1.74	.39
All Sizes	102,189	100.0	37.5	2.23	1.74	.49
<u>Unclassified</u>						
110 and larger	16,955	82.2	6.2	1.65	1.69	.04
120 to 180	3,646	17.7	1.3	1.92	1.69	.23
Smaller than 180	31	0.1	--	1.89	1.72	.17
All Sizes	20,632	100.0	7.6	1.69	1.69	.0
<u>All Grades</u>						
110 and larger	203,059	74.5	74.5	2.17	1.73	.44
120 to 180	68,523	25.1	25.1	2.63	1.77	.86
Smaller than 180	990	0.4	.4	2.20	1.74	.46
All Sizes	272,572	100.0	100.0	2.29	1.74	.55

(Continued)

Table XIV

Season's Average Net Return to Growers/1 from New York Auction
Sales of Oregon and Washington d'Anjou Pears, by Grades
and Size Groups, 1938-39 Season/2

Grade and Size Group	Sales (Number of Boxes)	Percentage		Weighted Average Price per Box	Average Marketing Charges 73	Av. Net Re- turn for Fruit Deliv. to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	- number -	- - per cent - -			- - - dollars - - -	
<u>WASHINGTON d'ANJOU PEARS</u>						
<u>Extra Fancy</u>						
110 and larger	78,029	67.9	37.9	1.96	1.72	.24
120 to 180	36,111	31.5	17.5	2.42	1.75	.67
Smaller than 180	717	0.6	.3	1.88	1.71	.17
All Sizes	114,857	100.0	55.8	2.10	1.73	.37
<u>Fancy</u>						
110 and larger	35,688	61.4	17.4	1.76	1.69	.07
120 to 180	21,616	37.2	10.5	2.13	1.72	.41
Smaller than 180	845	1.4	.4	1.76	1.70	.06
All Sizes	58,149	100.0	28.3	1.90	1.70	.20
<u>Unclassified</u>						
110 and larger	20,374	62.1	9.9	1.61	1.65	-.04
120 to 180	12,314	37.5	6.0	1.77	1.67	.10
Smaller than 180	115	0.4	.1	1.63	1.65	-.02
All Sizes	32,803	100.0	15.9	1.67	1.66	.01
<u>All Grades</u>						
110 and larger	134,091	65.2	65.2	1.85	1.70	.15
120 to 180	70,041	34.0	34.0	2.21	1.72	.49
Smaller than 180	1,677	0.8	.8	1.80	1.70	.10
All Sizes	205,809	100.0	100.0	1.97	1.71	.26
<u>OREGON AND WASHINGTON d'ANJOU PEARS</u>						
<u>U. S. No. 1</u>						
110 and larger	1,424	65.3	.3	2.35	1.75	.60
120 to 180	747	34.3	.2	2.55	1.77	.78
Smaller than 180	8	0.4	--	2.26	1.75	.51
All Sizes	2,179	100.0	.5	2.42	1.76	.66

(Continued)

Table XIV

Season's Average Net Return to Growers/¹ from New York Auction
Sales of Oregon and Washington d'Anjou Pears, by Grades
and Size Groups, 1938-39 Season/²

Grade and Size Group	Sales (Number of Boxes)	Percentage		Weighted Average Price per Box	Average Marketing Charges <u>/3</u>	Av. Net Re- turn for Fruit Deliv. to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	- number -	- - - per cent - -			- - - dollars - - -	

OREGON AND WASHINGTON D'ANJOU PEARS (CONT'D)

Extra Fancy

110 and larger	190,787	72.7	39.9	2.15	1.73	.42
120 to 180	70,680	26.9	14.7	2.61	1.76	.85
Smaller than 180	962	0.4	.2	2.03	1.72	.31
All Sizes	262,429	100.0	54.8	2.27	1.74	.53

Fancy

110 and larger	107,610	67.1	22.5	1.99	1.72	.27
120 to 180	51,177	31.9	10.7	2.36	1.74	.62
Smaller than 180	1,551	1.0	.3	1.93	1.72	.21
All Sizes	160,338	100.0	33.5	2.11	1.73	.38

Unclassified

110 and larger	37,329	69.8	7.8	1.62	1.67	.05
120 to 180	15,960	29.9	3.3	1.80	1.67	.13
Smaller than 180	146	0.3	.1	1.69	1.66	.03
All Sizes	53,435	100.0	11.2	1.68	1.67	.01

All Grades

110 and larger	337,150	70.4	70.5	2.04	1.72	.32
120 to 180	138,564	28.9	28.9	2.42	1.74	.68
Smaller than 180	2,667	0.6	.6	1.95	1.71	.24
All Sizes	478,381	100.0	100.0	2.15	1.73	.42

1. "Net Returns to Growers" in this computation means the returns for bare fruit delivered to the packing house.
2. To May 1, 1939.
3. The average marketing costs for the season are computed from the weekly marketing charges. For d'Anjou pears these consist of freight, refrigeration, packing (incl. box), loading and warehousing, storage, and terminal auction charges. All charges except storage and suction charges are assumed to be the same throughout the season, irrespective of time and volume of sale or grade of pears. Freight charges amount to \$.75 per box, refrigeration (Rule 247) \$.09 per box, packing \$.50 per box, loading and warehousing \$.05 per box, or a total of fixed charges of \$1.39 per box. Storage or pre-cooling charges are assumed to be 9 cents through Oct. 14, 15 cents through Nov. 11, 18 cents through Dec. 16, and 20 cents through the remainder of the season. Auction charges are calculated at 7 per cent of selling price.

Table XV

Season's Average Net Returns to Growers/1 from New York Auction
Sales of Oregon and Washington Beurre Bosc Pears
by Grades and Size Groups, 1938-39 Season

Grade and Size Group	Sales (Number of Boxes)	Percentage		Weighted Av. Price per Box	Average Marketing Charges/2	Av. Net Return for Fruit De- livered to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	number	- - per cent	- -	dollars	dollars	dollars
<u>Oregon Beurre Bosc Pears</u>						
<u>U. S. No. 1.</u>						
110 and larger	57,055	18.1	15.8	1.91	1.72	.19
120-180	247,070	78.3	68.2	2.06	1.73	.33
Smaller than 180	11,328	3.6	3.1	1.98	1.73	.25
All Sizes	315,453	100.0	87.1	2.03	1.73	.30
<u>Extra Fancy</u>						
110 and larger	6,786	34.5	1.9	1.93	1.72	.21
120-180	12,622	64.1	3.5	1.97	1.73	.24
Smaller than 180	284	1.4	.1	2.09	1.75	.34
All Sizes	19,692	100.0	5.5	1.96	1.73	.23
<u>Fancy</u>						
110 and larger	7,677	29.2	2.1	1.78	1.70	.08
120-180	17,909	68.2	4.9	1.80	1.72	.08
Smaller than 180	686	2.6	.2	1.87	1.73	.14
All Sizes	26,272	100.0	7.2	1.80	1.72	.08
<u>Unclassified</u>						
110 and larger	210	29.2	--	1.28	1.60	- .32
120-180	510	70.8	.2	1.41	1.61	- .20
All Sizes	720	100.0	.2	1.37	1.61	- .24
<u>All Grades</u>						
110 and larger	71,728	19.8	19.8	1.89	1.72	.17
120-180	278,111	76.8	76.8	2.04	1.73	.31
Smaller than 180	12,298	3.4	3.4	1.98	1.73	.25
All Sizes	362,137	100.0	100.0	2.01	1.73	.28
<u>Washington Beurre Bosc Pears</u>						
<u>Extra Fancy</u>						
110 and larger	24,454	57.7	40.2	1.61	1.68	- .07
120-180	17,865	42.2	29.3	1.76	1.68	.08
Smaller than 180	28	.1	--	1.77	1.71	.06
All Sizes	42,347	100.0	69.5	1.67	1.69	- .02

(Continued)

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Table XV

Season's Average Net Returns to Growers/1 from New York Auction
Sales of Oregon and Washington Beurres Bosc Pears
by Grades and Size Groups, 1938-39 Season

Grade and Size Group	Sales (Number of Boxes)	Percentage		Weighted Av. Price per Box	Average Marketing Charges/2	Av. Net Return for Fruit De- livered to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	number	-	per cent	-	dollars	dollars
Washington Beurres Bosc Pears (Cont'd)						
<u>Fancy</u>						
110 and larger	8,936	55.6	14.7	1.51	1.68	- .17
120-180	7,076	44.1	11.6	1.64	1.68	- .04
Smaller than 180	47	.3	.1	1.61	1.69	- .08
All Sizes	16,059	100.0	26.4	1.57	1.68	- .11
<u>Unclassified 1</u>						
110 and larger	1,619	64.2	2.6	1.35	1.57	- .22
120-180	904	35.8	1.5	1.44	1.55	- .11
All Sizes	2,523	100.0	4.1	1.38	1.56	- .18
<u>All Grades</u>						
110 and larger	35,009	57.5	57.5	1.57	1.68	- .11
120-180	25,845	42.4	42.4	1.72	1.68	.04
Smaller than 180	75	.1	.1	1.67	1.70	- .03
All Sizes	60,929	100.0	100.0	1.63	1.68	- .05
Oregon and Washington Beurres Bosc Pears						
<u>U. S. No. 1</u>						
110 and larger	57,055	18.1	13.5	1.91	1.72	.19
120-180	247,070	78.3	58.4	2.06	1.73	.33
Smaller than 180	11,328	3.6	2.7	1.98	1.73	.25
All Sizes	315,453	100.0	74.6	2.03	1.73	.30
<u>Extra Fancy</u>						
110 and larger	31,240	50.4	7.4	1.68	1.69	- .01
120-180	30,487	49.1	7.2	1.85	1.70	.15
Smaller than 180	312	.5	.1	2.06	1.75	.31
All Sizes	62,039	100.0	14.7	1.76	1.70	.06

(Continued)

Table XV.

Season's Average Net Returns to Growers/1 from New York Auction
Sales of Oregon and Washington Beurre Bosc Pears
by Grades and Size Groups, 1938-39 Season

Grade and Size Group	Sales (Number of Boxes)	Percentage		Weighted Av. Price per Box	Average Marketing Charges/2	Av. Net Return for Fruit De- livered to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	number	- per cent -		dollars	dollars	dollars

Oregon and Washington Beurre Bosc Pears (Cont'd)

Fancy

110 and larger	16,613	39.3	3.9	1.63	1.69	-.06
120-180	24,985	59.0	5.9	1.75	1.71	.04
Smaller than 180	733	1.7	.2	1.85	1.73	.12
All Sizes	42,331	100.0	10.0	1.71	1.70	.01

Unclassified

110 and larger	1,829	56.4	.4	1.34	1.57	-.23
120-180	1,414	43.6	.3	1.43	1.57	-.14
All Sizes	3,243	100.0	.7	1.38	1.57	-.19

All Grades

110 and larger	106,737	25.2	25.2	1.78	1.70	.08
120-180	303,956	71.8	71.8	2.01	1.73	.28
Smaller than 180	12,373	3.0	3.0	1.97	1.73	.24
All Sizes	423,066	100.0	100.0	1.95	1.72	.23

- /1. "Net Returns to Growers" in this computation means the returns for bare fruit delivered to the packing house.
- /2. The Average Marketing Charges for the season are computed from the weekly marketing charges. For Beurre Bosc pears these consist of freight, refrigeration, packing (including box), loading and warehousing, ripening, storage, and terminal auction charges. All charges except storage and auction charges are assumed to be the same throughout the season, irrespective of time and volume of sale or grade of pears. Freight charges amount to \$.75 per box, refrigeration (Rule 247) \$.09 per box, packing \$.50 per box loading and warehousing \$.05 per box, ripening \$.03 per box, or a total of fixed charges of \$1.42 per box. Storage charges are approximately 20 cents for the season. Storage or pre-cooling charges are assumed to be 9 cents through October 14, 15 cents through November 11, 18 cents through December 16, and 20 cents through the remainder of the season. Auction charges are calculated at 7 per cent of the auction market price.

Table XVI

Season's Average Net Returns to Growers/1 from New York Auction
Sales of Oregon and Washington Winter Nelis Pears,
by Grades and Size Groups, 1938-39 Season/2

Grade and Size Group	Sales (Number of Boxes)	Percentage		Weighted Average Price per Box	Average Marketing Charges /3	Av. Net Re- turn for Fruit Delivered to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	- number -	- - per cent -			- - - dollars -	

OREGON WINTER NELIS PEARS

U. S. No. 1

110 and larger	793	11.8	1.7	1.77	1.73	.04
120 to 180	5,393	80.3	11.9	1.88	1.73	.15
Smaller than 180	531	7.9	1.2	1.72	1.72	--
All Sizes	6,717	100.0	14.8	1.86	1.73	.13

Extra Fancy

110 and larger	2,981	13.5	6.6	1.96	1.72	.24
120 to 180	17,541	79.5	38.7	2.07	1.73	.34
Smaller than 180	1,531	7.0	3.4	1.91	1.72	.19
All Sizes	22,053	100.0	48.7	2.04	1.73	.31

Fancy

110 and larger	1,791	10.9	4.0	1.85	1.71	.14
120 to 180	13,119	79.5	29.0	1.95	1.72	.23
Smaller than 180	1,587	9.6	3.5	1.82	1.71	.11
All Sizes	16,497	100.0	36.5	1.93	1.72	.21

All Grades

110 and larger	5,565	12.3	12.3	1.90	1.72	.18
120 to 180	36,053	79.6	79.6	2.00	1.73	.27
Smaller than 180	3,649	8.1	8.1	1.85	1.72	.13
All Sizes	45,267	100.0	100.0	1.98	1.73	.25

WASHINGTON WINTER NELIS

Extra Fancy

110 and larger	1,684	9.2	7.1	1.37	1.68	-.31
120 to 180	14,511	79.1	61.3	1.48	1.68	-.20
Smaller than 180	2,140	11.7	9.0	1.24	1.68	-.44
All Sizes	18,335	100.0	77.4	1.44	1.68	-.24

Fancy

110 and larger	455	8.5	1.9	1.34	1.67	-.33
120 to 180	3,884	72.6	16.4	1.39	1.68	-.29
Smaller than 180	1,010	18.9	4.3	1.15	1.67	-.52
All Sizes	5,349	100.0	22.6	1.34	1.68	-.34

(Continued)

Table XVI

Season's Average Net Returns to Growers/1 from New York Auction Sales of Oregon and Washington Winter Nelis Pears, by Grades and Size Groups, 1938-39 Season/2

Grade and Size Group	Sales (Number of Boxes)	Percentage		Weighted Average Price per Box	Average Marketing Charges /3	Av. Net Re- turn for Fruit Delivered to Packing House
		Size Groups by Grades	All Size Groups and Grades			
	1	2	3	4	5	6
	- number -	- - per cent - -			- - - dollars - - -	

WASHINGTON WINTER NELIS (CONT'D)

All Grades

110 and larger	2,139	9.0	9.0	1.36	1.68	-.32
120 to 180	18,395	77.7	77.7	1.46	1.68	-.22
Smaller than 180	3,150	13.3	13.3	1.21	1.67	-.46
All Sizes	23,684	100.0	100.0	1.42	1.68	-.26

WASHINGTON AND OREGON WINTER NELIS PEARS

U. S. No. 1

110 and larger	793	11.8	1.2	1.77	1.73	.04
120 to 180	5,393	80.3	7.8	1.88	1.73	.15
Smaller than 180	531	7.9	.8	1.72	1.72	.0
All Sizes	6,717	100.0	9.8	1.86	1.73	.13

Extra Fancy

110 and larger	4,665	11.6	6.8	1.75	1.71	.04
120 to 180	32,052	79.3	46.5	1.80	1.71	.09
Smaller than 180	3,671	9.1	5.3	1.52	1.70	-.18
All Sizes	40,388	100.0	58.6	1.77	1.71	.06

Fancy

110 and larger	2,246	10.3	3.2	1.75	1.75	.05
120 to 180	17,003	77.8	24.6	1.82	1.71	.11
Smaller than 180	2,597	11.9	3.8	1.56	1.70	-.14
All Sizes	21,846	100.0	31.6	1.78	1.71	.07

All Grades

110 and larger	7,704	11.2	11.2	1.75	1.70	.04
120 to 180	54,448	78.9	78.9	1.81	1.71	.10
Smaller than 180	6,799	9.9	9.9	1.55	1.70	-.15
All Sizes	68,951	100.0	100.0	1.78	1.71	.07

- /1. "Net Returns to Growers" in this computation means the returns for bare fruit delivered to the packing house.
- /2. To May 1, 1939.
- /3. The average marketing costs for the season are computed from the weekly marketing charges. For Winter Nelis pears these consist of freight, refrigeration, packing (incl. box), loading and warehousing, storage, and terminal auction charges. All charges except storage and auction charges are assumed to be the same throughout the season, irrespective of time and volume of sale or grade of pears. Freight charges amount to \$.75 per box, refrigeration (Rule 247) \$.09 per box, packing \$.50 per box, loading and warehousing, \$.05 per box, or a total of fixed charges of \$1.39. Storage charges are approximately 20 cents for the season. Storage or precooling charges are assumed to be \$.09 thru Oct. 14, \$.15 thru Nov. 11, \$.18 thru Dec. 16, \$.20 thru remainder of season. Auction charges are calculated at 7 per cent of the auction market price.

Table XVII

Purchasing Power Parity of California Fall and Winter Pears/¹

In Terms of Dollars Per Box/²

Season	New York Auction Price	Farm Price	Index of Prices Paid by Farmers/ ⁴	Parity Price	Actual Price Above (+) or Below (-) Parity	Actual Price in Per cent of Parity Price
	1	2	3	4	5	6
	dollars per box		per cent	dollars per box		per cent
1920-28 Avg.	3.57	1.53	100.0	1.53	--	100.0
1929	3.32	1.35	94.6	1.38	- .03	97.8
1930	2.15	.20	85.6	1.31	- 1.11	15.3
1931	2.44	.55	72.6	1.11	- .56	49.5
1932	1.68	.09	64.6	.99	- .90	9.1
1933	1.83	.22	73.0	1.12	- .90	19.6
1934	2.17	.46	78.8	1.21	- .75	38.0
1935	1.96	.22	76.5	1.17	- .96	18.8
1936	2.31	.54	81.0	1.24	- .70	43.5
1937	2.02	.27	79.7	1.22	- .95	22.1
1938/ ⁵	1.84	.11	75.5	1.16	- 1.05	9.5

/1. Varieties included are Beurre Hardy, Beurre Bosc, D'Anjou, du Comice, Beurre Clairgeau, Winter Nelis, Easter Beurre, Glout Morceau, and P. Barry.

/2. Standard boxes of approximately 48 pounds net.

/3. Weighted average New York auction price of the above varieties minus estimated direct harvesting and marketing charges to obtain a price per box of pears on the tree.

/4. July to June average.

/5. To May 1, 1939.

Source of data: Col. 1; New York Daily Fruit Reporter.
Col. 2; New York auction price minus direct harvesting and Marketing charges.
Col. 3; U. S. Dept. Agr., Bur. Agr. Econ., Div. Statistical and Historical Research.
Cols. 4, 5, and 6; Computed.

Purchasing power parity calculations for Oregon and Washington d'Anjou and Beurre Bosc pears are presented in tables XVIII and XIX. D'Anjou pears grown in the Medford District of Oregon during the 1938-39 season averaged 88 cents below the level of prices necessary to give growers in that district a purchasing power per unit equivalent to prices obtained during the period 1919 to 1928. Prices of Washington d'Anjou pears during the past season were 9 per cent of parity. Beurre Bosc pears grown in the Medford District of Oregon were 8.5 per cent of prices received during the base period, while growers of Beurre Bosc pears in the state of Washington incurred an average loss of 20 cents per box, the price being \$1.66 per box below the parity price of \$1.46 per box.

Producing Areas

Production of fall and winter pears is limited almost entirely to the three Pacific Coast states of Oregon, Washington, and California. A small volume of these late dessert varieties, which is estimated not to exceed 5 per cent of the United States total, is reported by official and private sources to be produced in the states of Michigan, Colorado, and New York. Production in these states is so insignificant in volume compared with late pear production in the three Pacific Coast states and with the possible exception of Colorado is so scattered that it may well be disregarded and considered as not having any appreciable effect upon the marketing of Pacific Coast fall and winter pears.

According to acreage and tree surveys recently completed in the three Pacific Coast states, the total acreage of late pears is approximately 28,500 acres, of which 34 per cent are located in California, 43 per cent in

Table XVIII

Purchasing Power Parity of Oregon d'Anjou and Beurre Bosc Pears/4,
1929-1938, and 1919-1938 Averages
(In Terms of Dollars Per Box)

Season	Farm Price/1	Index of Prices Paid by Farmers/2	Parity Price	Actual Price Above (+) or Below (-) Parity	Actual Price in Per Cent of Parity Price
	1	2	3	4	5
	dollars	per cent	dollars	dollars	per cent
<u>D'ANJOU</u>					
1919-1928 Avg.	1.70	100.0	1.70	--	100.0
1929	2.06	94.6	1.61	+ .45	128.0
1930	.64	85.6	1.46	- .82	43.8
1931	1.31	72.6	1.23	+ .08	106.5
1932	.30	64.6	1.10	- .80	27.3
1933	.95	73.0	1.24	- .29	76.6
1934	.98	78.8	1.34	- .36	73.1
1935	.43	76.5	1.30	- .87	33.1
1936	1.07	81.0	1.38	- .31	77.5
1937	.22/3	79.7	1.35	- 1.13	16.3
1938/5	.40/3	75.5	1.28	- .88	31.2
<u>BEURRE BOSCO</u>					
1919-1928 Avg.	2.03	100.0	2.03	--	100.0
1929	1.57	94.6	1.92	- .35	81.8
1930	- .13	85.6	1.74	- 1.87	--
1931	.91	72.6	1.47	- .56	61.9
1932	- .18	64.6	1.31	- 1.49	--
1933	.16	73.0	1.48	- 1.32	10.8
1934	.40	78.8	1.60	- 1.20	25.0
1935	.49	76.5	1.55	- 1.06	31.6
1936	.57	81.0	1.64	- 1.07	34.8
1937	.18/3	79.7	1.62	- 1.44	11.1
1938	.13/3	75.5	1.53	- 1.40	8.5

- /1. Net returns as given in table XI minus \$.15 for picking and hauling.
- /2. July to June average. Converted from 1910-1914 base by dividing by 155.8.
- /3. New York auction price reduced to "on tree" price.
- /4. Grown in the Medford District.
- /5. To May 1, 1939.

Table XIX

Purchasing Power Parity of Washington d'Anjou and Beurre Bosc
Pears, 1929-1938, and 1919-1928 Averages
(In Terms of Dollars Per Box)

Season	Farm Price <u>/1</u>	Index of Prices Paid by Farmers <u>/2</u>	Parity Price	Actual Price Above (+) or Below (-) Parity	Actual Price in Per Cent of Parity Price
	1	2	3	4	5
	dollars	per cent	dollars	dollars	per cent
<u>D' ANJOU</u>					
1919-1928 Avg.	1.79	100.0	1.79	--	100.0
1929	1.93	94.6	1.69	+ .24	114.2
1930	.84	85.6	1.53	- .69	54.9
1931	.87	72.6	1.30	- .43	66.9
1932	.55	64.6	1.16	- .61	47.4
1933	.55	73.0	1.31	- .76	42.0
1934	.71	78.8	1.41	- .70	50.4
1935	.49	76.5	1.37	- .88	35.8
1936	.66	81.0	1.45	- .79	45.5
1937	.13/ <u>3</u>	79.7	1.43	- 1.30	9.1
1938/ <u>4</u>	.11/ <u>3</u>	75.5	1.35	- 1.24	8.9
<u>BEURRE BOSC</u>					
1919-1928 Avg.	1.94	100.0	1.94	--	100.0
1929	1.52	94.6	1.84	- .32	82.6
1930	.26	85.6	1.66	- 1.40	15.7
1931	.54	72.6	1.41	- .87	38.3
1932	- .17	64.6	1.25	- 1.42	--
1933	.04	73.0	1.42	- 1.38	2.8
1934	.22	78.8	1.53	- 1.31	14.4
1935	.20	76.5	1.48	- 1.28	13.5
1936	.35	81.0	1.57	- 1.22	22.3
1937	- .28/ <u>3</u>	79.7	1.55	- 1.83	--
1938	- .20/ <u>3</u>	75.5	1.46	- 1.66	--

- /1. Net returns as given in table XII minus \$.15 for picking and hauling.
 /2. July to June average. Converted from 1910-1914 base by dividing by 155.8.
 /3. New York price reduced to "on tree" price.
 /4. To May 1, 1939.

Oregon, and 23 per cent in Washington. The surveys further show that fall and winter pear production is concentrated in six major districts, two in each of the three states.

Over one-half of the acreage of winter pears in California is located in six counties comprising the Santa Clara Valley District. The counties in this district, which include a total of 5,630 acres planted to late pear varieties, are Alameda, Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz. The Sacramento Valley-Foothill District, comprising twelve counties with greatly varying local conditions of production and extending from the lower Sacramento River Valley into the foothill regions of the Sierra Mountains, includes almost one-third of California's late pear acreage, a total of 3,050 acres. The counties in this area are Butte, Colusa, Contra Costa, Eldorado, Glenn, Nevada, Placer, Sacramento, Solano, Sutter, Yolo, and Yuba. The most important winter pear producing counties in this district, however, are Placer and Eldorado Counties.

In the State of Oregon, two counties are outstanding in late pear production, namely, Jackson County in the southwestern part of the state and Hood River County in the north central part. Jackson County, combined with Josephine County, comprises the Medford District which includes approximately 561,000 fall and winter pear trees or a total of 7,200 acres. The Hood River District includes Hood River County in Oregon and parts of Skamania and Klickitat Counties in the state of Washington. Because of great similarity in the natural and economic conditions existing between the area in Oregon and the adjoining area across the Columbia River in Washington, they are considered one district. The tree number of other than Bartlett pears as given in the Northwest Fruit and Berry Survey converted into acres

indicates a total of 3,280 acres planted to late varieties in this district.

In the state of Washington the Yakima District, including Yakima and Benton Counties, and the Wenatchee-Okanogan District, including Chelan, Okanogan, Douglas and Grant Counties, are the most important fall and winter pear producing areas. The Yakima District with a total late pear acreage of approximately 3,720 acres is the more important of the two areas. The Wenatchee-Okanogan District has about 2,000 acres planted to late varieties.

Volume and Trend of Production

Revised production estimates published by the Bureau of Agricultural Economics and presented in table XX give the production of other than Bartlett pears for the period 1925 to 1938.^{/1} On the average of the five-year period 1933-1937, the production of late pears on the Pacific Coast amounted to 109,570 tons, an increase of 22 per cent over the preceding five-year period 1928-1932. Estimates for the 1938 season indicate a total production of other than Bartlett pears of approximately 155,300 tons. Of the total Pacific Coast late pear production on the average of the five-year period 1933-1937, 27 per cent originated in California, 43 per cent in Oregon, and 30 per cent in Washington. The proportions for the 1938 crop were: California, 26 per cent; Oregon, 45 per cent; and Washington, 29 per cent.

Comparing the average production during the years 1933-1937 with that for the period 1928-1932 by individual states, it will be noted that production in California increased by 6 per cent, in Oregon by 26 per cent, and in Washington by 33 per cent. In all three states the 1938 crop was much larger than that of 1937, the increase for this year over the preceding five -

^{/1}. For the whole Pacific Coast the production of other than Bartlett pears amounted to 26 per cent of the total pear production on the average for the 1933 to 1937 seasons. In California, the proportion of fall and winter pears of the total was 14 per cent; in Oregon, 58 per cent, and in Washington, 26 per cent.

TABLE XX

Production of Fall and Winter Pears in the Pacific Coast States
1925 to 1938

Year	California	Oregon	Washington	Pacific Coast
	1	2	3	4
	- - - tons - - -			
1925	18,000	17,180	9,650	44,830
1926	23,000	35,620	12,950	71,570
1927	20,000	35,000	10,900	65,900
1928	21,100	38,650	24,320	84,070
1929	18,000	38,250	15,880	72,130
1930	34,000	48,780	31,300	114,080
1931	30,100	20,000	28,180	78,280
1932	35,400	40,520	25,120	101,040
Av. 1928-1932	27,720	37,240	24,960	89,920
1933	36,600	41,020	26,000	103,620
1934	40,800	33,580	26,300	100,680
1935	17,700	48,120	36,800	102,620
1936	28,400	52,000	35,000	115,400
1937	23,000	60,800	41,720	125,520
Av. 1933-1937	29,300	47,105	33,165	109,570
1938	40,000	70,300	45,000	155,300

Source of data: U. S. Dept. Agr., Bur. Agr. Econ., Div. Crop and Livestock Estimates.

year average was 37 per cent in California, 49 per cent in Oregon, and 36 per cent in Washington. In the two latter states the 1938 late pear crop was the largest on record.

Information given in the three state surveys with regard to the age distribution of fall and winter pear plantings on the Pacific Coast indicates that further increases in late pear production must be expected in the near future. Nearly all, that is, 97 per cent of the fall and winter pear trees standing at present were planted during the past thirty years. Trees of an age of ten years or less amount to over one-third of all trees standing. Increased production, judging from the age of the trees, will occur, particularly in the two northwestern states, but a substantial increase can also be foreseen for late pear production in California.